Performance Data Sheet

RKA5490CXC

General Information

Model	RKA5490CXC	**Refrigerant**	R-407C
Test Condition	ASHRAE	**Performance Test Voltage**	240V ~ 50HZ
Return Gas	18.3°C (65°F) RETURN GAS	**Motor Type**	PSC

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
-15	Btu/h	2130	2110					
	Watts	350	364					
	Amps	1.47	1.50					
	Lb/h	29.4	29.2					
-10	Btu/h	2440	2380	2320				
	Watts	362	379	397				
	Amps	1.54	1.59	1.64				
	Lb/h	32.8	32.6	32.3				
-5	Btu/h	2800	2700	2600	2500			
	Watts	371	393	414	436			
	Amps	1.60	1.67	1.74	1.81			
	Lb/h	36.9	36.6	36.2	35.9			
0	Btu/h	3220	3080	2930	2790	2640		
	Watts	379	405	430	456	482		
	Amps	1.65	1.73	1.82	1.91	2.00		
	Lb/h	41.6	41.1	40.7	40.3	39.9		
5	Btu/h	3700	3510	3320	3130	2940		
	Watts	386	415	445	475	505		
	Amps	1.68	1.78	1.89	2.00	2.11		
	Lb/h	46.8	46.3	45.8	45.3	44.8		
10	Btu/h	4230	4000	3770	3530	3300	3070	2830
	Watts	391	424	458	491	525	560	595
	Amps	1.70	1.83	1.95	2.08	2.21	2.34	2.48
	Lb/h	52.7	52.1	51.5	50.9	50.3	49.7	49.1
15	Btu/h	4820	4540	4260	3990	3710	3430	3150
	Watts	394	431	469	507	545	583	622
	Amps	1.71	1.85	2.00	2.15	2.30	2.45	2.60
	Lb/h	59.2	58.5	57.8	57.1	56.4	55.7	55.0
20	Btu/h	5460	5140	4820	4500	4180	3860	3530
	Watts	395	436	478	520	562	605	647
	Amps	1.71	1.87	2.04	2.20	2.37	2.54	2.71
	Lb/h	66.3	65.5	64.7	63.9	63.1	62.3	61.6

25	Btu/h	6160	5800	5430	5070	4700	4330	3970
	Watts	394	440	486	532	578	624	671
	Amps	1.69	1.88	2.06	2.25	2.43	2.62	2.81
	Lb/h	74.1	73.2	72.3	71.4	70.5	69.6	68.7
30	Btu/h	6920	6510	6100	5690	5280	4870	4460
	Watts	391	441	491	541	592	643	693
	Amps	1.67	1.87	2.08	2.28	2.49	2.69	2.90
	Lb/h	82.5	81.5	80.5	79.4	78.5	77.5	76.5
35	Btu/h	7740	7280	6830	6370	5920	5460	5010
	Watts	385	440	494	549	604	659	714
	Amps	1.64	1.86	2.08	2.30	2.53	2.75	2.98
	Lb/h	91.5	90.4	89.3	88.2	87.1	86.0	84.9
40	Btu/h	8610	8110	7610	7110	6610	6110	5610
	Watts	378	437	496	555	614	673	732
	Amps	1.59	1.83	2.07	2.32	2.56	2.80	3.05
	Lb/h	101	100	98.8	97.5	96.3	95.1	93.9
45	Btu/h	9550	9000	8450	7910	7360	6820	6270
	Watts	368	431	495	558	621	685	749
	Amps	1.54	1.80	2.06	2.32	2.58	2.84	3.11
	Lb/h	112	110	109	108	106	105	104
50	Btu/h	10500	9950	9360	8760	8170	7580	6990
	Watts	356	424	491	559	627	695	763
	Amps	1.48	1.75	2.03	2.31	2.59	2.87	3.15
	Lb/h	123	121	120	118	117	115	114
55	Btu/h	11600	11000	10300	9680	9040	8410	7770
	Watts	341	413	486	558	630	703	775
	Amps	1.41	1.70	2.00	2.29	2.59	2.89	3.19
	Lb/h	134	133	131	130	128	126	125

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	4.361787E+03	1.809387E+02	9.618374E-01	4.502834E+01
C2	1.599976E+02	-5.104069E+00	-2.322847E-02	1.142011E+00
C3	-1.426865E+01	2.488778E+00	8.567700E-03	-4.343312E-02
C4	1.147787E+00	-4.198064E-02	-2.253729E-04	1.262687E-02
C5	-8.907333E-01	8.455650E-02	3.880844E-04	-1.941919E-03
C6	2.025106E-03	-6.466885E-04	-2.775041E-06	-4.650593E-06
C7	6.438908E-04	-1.157746E-04	3.986424E-07	1.010825E-05
C8	-5.441556E-04	1.116970E-04	-2.111099E-07	-6.780497E-06
C9	1.233162E-04	-2.993190E-05	-4.203120E-09	9.506657E-07
C10	-2.135011E-05	6.971615E-06	3.038912E-08	6.733528E-08

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature